

WHAT IS CLAIMED IS:

1. A high-frequency power inductance element comprising:

5 a coil formed of a band-shaped conductor spirally wound in a cylindrical shape so that the wider surfaces thereof come flush with each other;

an electrically insulated bobbin for mounting said coil thereon; and

10 a core inserted into said bobbin to form a closed magnetic circuit.

2. A high-frequency power inductance element according to claim 1, wherein said coil is formed of the band-shaped
15 conductor wound spirally in a cylindrical shape such that said band-shaped conductor being formed into rectangular staggered patterns which extend in the same direction as a whole while bending in an L-shape to the left and right, is folded in the vertical and horizontal direction
20 alternately relative to the pattern plane.

3. A high-frequency power inductance element according to claim 1 or 2, wherein said coil is provided so that the wider surfaces of said band-shaped conductor contact a
25 mounting surface.

4. A high-frequency power inductance element according to claim 1 or 2, wherein end portions of the band-shaped conductor forming said coil are formed as coil terminals.

5. A high-frequency power inductance element according to claim 1 or 2, wherein the middle portion of the band-shaped conductor forming said coil is formed as a middle tap-out terminal of said coil.

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6. A high-frequency power inductance element according to claim 1 or 2, wherein said bobbin is integrally formed of two bobbin portions, said coil is mounted on the outer surface of each of said two bobbin portions respectively, each leg portion of a U-shaped core is inserted into said two bobbin portions, and each top end surface of said leg portions is magnetically bridged by an I-shaped core to form an annular closed magnetic circuit.

15 7. A high-frequency power inductance element according to claim 1 or 2, wherein said bobbin is integrally formed with a tray portion which positions and fixes said core, and electrically insulates said core from a mounting surface.

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8. A high-frequency power inductance element according to claim 1 or 2, wherein said bobbin is formed with a fixing tab for mounting on a printed circuit board.

25 9. A high-frequency power inductance element according to claim 1 or 2, wherein a plurality of said coils are provided to form a primary coil and a secondary coil of a transformer.

30 10. A high-frequency power inductance element according

to claim 1 or 2, wherein said coil forms a choke coil.

11. A high-frequency power inductance element according to claim 1 or 2, wherein a plurality of said coils are
5 provided to be connected in series or in parallel so as to form a choke coil.

12. A high-frequency power inductance element according to claim 1 or 2, wherein a rectangular copper strip is used
10 as said band-shaped conductor.